Electronic Acknowledgement Receipt			
EFS ID:	2550386		
Application Number:	10681937		
International Application Number:			
Confirmation Number:	7758		
Title of Invention:	Transmitting and receiving apparatus for supporting transmit antenna diversity using space-time block code		
First Named Inventor/Applicant Name:	Chan-Soo Hwang		
Customer Number:	66547		
Filer:	Paul J. Farrell/Wendy Greenseich		
Filer Authorized By:	Paul J. Farrell		
Attorney Docket Number:	678-1109 (P10973)		
Receipt Date:	05-DEC-2007		
Filing Date:	09-OCT-2003		
Time Stamp:	15:38:46		
Application Type:	Utility under 35 USC 111(a)		
Payment information:			
Submitted with Payment	no		
File I letters			

Cabinition main aymont	110		
File Lieting.			
File Listing:			

· no Lioting.					
Document Number	Document Description	File Name	File Size(Bytes) /Message Digest	Multi Part /.zip	Pages (if appl.)
1	Information Disclosure Statement Letter	IDS.pdf	89478	no	3
			56a1ddb1f72c13ca872b1bbbd1735259 d6f66879		
Manainas					

Warnings:

Information:

2	NPL Documents	A_Rate-One_Non-Orthogon al_Space-Time_Coded_OFD M_System.pdf	387761	no	7
			bd1f8279309f6bdb30627565bad70f1f1 0ffb014		'
Warnings:					
Information:					
3	NPL Documents	Adaptive_Modulation_using_ Space-Time_Block_Code_M atrix.pdf	236639	no	4
			2c6dc15607dc7734b5aa48d509b52d4 54b353249		
Warnings:					n).
	in the PDF is too large. The pages sho Image File Wrapper and may affect subs		F is submitted, the page	es will be res	sized upon
Information:					
4	NPL Documents	Improved_MIMO_Performan ce with Non-Orthogonal Sp	457534	no	6
		ace-Time_Block_Codes.pdf	22502dod+0da133f9a34c+b5263c+474 b9fc07ee		
Warnings:				<u> </u>	
Information:					
5	NPL Documents	Improved_Quasi-Orthogonal	341495	no	6
٠	III E Boodinonia	_Codes.pdf	a2517cld50c70f325eb3c94341b2d4ab 5b2f1da6		
Warnings:					
Information:	1				
6 NPL Documents	Minimal_Non-Orthogonality_	208172	no	4	
		Rate.pdf	54bd5d6t8c70e9c90aa155b29f9816b7 0a72d14		
Warnings:					
Information:	1				
7	NPL Documents	New_Space-Time_Block_Co des_for_High_Throughput_E fficiency.pdf	412504	no	6
			2d956e6b2d52d4f7c5dbb7a470bba2ff 404671c9		
Warnings:					
Information:					
8	NPL Documents	Optimizing_Space-Time_Blo ck_Codes_by_Constellation_	174579	no	3
o INFL Documents	Rotations.pdf	8u856u16bb193d56b73ed17b3245d12 dHec9e1d		_	
Warnings:					
Information:	:				
9	Foreign Reference	WO02080375.pdf	1701845	no	42
			99139e60c73e2da12cc80771cbe179b1 e1f74e4f		
Warnings:					
The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing					
Information:	Information:				

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

## New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

## National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/IDO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filling Receipt, in due course.

## New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.